

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

<b>In the Matter of</b>	)	
	)	
<b>Expanding Flexible Use of the 3.7 to 4.2 GHz Band</b>	)	<b>GN Docket No. 18-122</b>
	)	
<b>Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz</b>	)	<b>GN Docket No. 17-183</b>
	)	

**REPLY COMMENTS OF Foxconn Industrial Internet**

Foxconn Industrial Internet, a manufacturing company based in Milwaukee Wisconsin, pursuant to Section 1.415(c) of the Commission's Rules [47 C.F.R. §1.415(c)], hereby respectfully submits these reply comments in this proceeding pursuant to the *Notice of Proposed Rule Making*, FCC 18-91, released July 13, 2018 (the *Notice*). The *Notice* sought comment on various proposals for transitioning all or part of the 3.7-4.2 GHz band for flexible use, terrestrial mobile applications, and it explores options for more efficient and intensive fixed use of the same band. Foxconn Industrial Internet has a strong interest in the availability of spectrum for private local 5G networks to facilitate innovations in industrial manufacturing systems. Relative to this interest, Foxconn Industrial Internet states as follows:

1. Foxconn Industrial Internet is a Wisconsin based company that focuses on North American manufacturing and manufacturing automation solutions. Foxconn Industrial Internet supports both internal factories and local manufacturers with industrial automation and optimization solutions to improve efficacy and efficiency in their manufacturing processes. Foxconn Industrial Internet currently has internal manufacturing in

California, Texas, North Carolina, and Wisconsin. Foxconn Industrial Internet's Milwaukee location serves as corporate headquarters for North America. Foxconn Industrial Internet is currently developing a number of industrial automation solutions that would require the availability of local 5G networks.

2. Foxconn Industrial Internet is familiar with and supports the comments filed in this proceeding by Robert Bosch LLC and its Supporting Parties. Bosch has proposed the implementation of localized, 5G private networks in support of Industry 4.0 and next-generation manufacturing in the United States in a portion of this band. Those comments accurately note that manufacturing stands to benefit profoundly in the near future from a combination of commercial 5G broadband service purchased from providers, but as well the authorization of private 5G local networks that can be customized by manufacturers to suit their localized needs. The latter is a critical necessity for the realization of the increases in efficiency, output and reliability of manufacturing facilities in the United States promised by Industry 4.0 technology.

3. The Bosch comments in this proceeding correctly note that local deployment by the private sector would be a key component to the rollout of 5G in support of Industry 4.0 initiatives in manufacturing and industrial applications. As is the case with today's Wi-Fi hotspots, the manufacturing industry must be able to manage its own individual 5G local networks. Many components of modern factories cannot operate entirely with communications service provided by commercial mobile broadband service providers. This is true for many reasons, including liability issues, intellectual property protection and security. It is critical for 5G technology to be available to the entity involved in production and integrated locally in support of new and future manufacturing and industrial applications. Only in this way will the opportunities offered by Industry 4.0 be realized.

Therefore, the foregoing considered, Foxconn Industrial Internet respectfully requests that the Commission make 5G technology available on a flexible, coordinated basis for private 5G local networks in the

band 3.7-3.8 GHz for use in support of Industry 4.0 applications as proposed by Bosch and its supporting parties.

Respectfully submitted,

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